Remarks

Support for the above-requested amendments to claim 1 is found at least at page 6, lines 23-26, page 7, lines 10-11, page 9, lines 15 – 16, and FIG.1. Claims 3 and 39 were amended to place the claims in proper Markush format. Newly added claims 47, 49, and 54 are supported at least by page 6, line 25 to page 7, line 4 and lines 11-18. Support for new claim 48 is found at least at page 8, lines 8-10. New claim 50 is supported at least by page 6, lines 21-26 and FIG. 4. Newly added claims 51 and 62 are supported at least by page 9, lines 15-16. Support for new claim 52 is found at least at page 6, lines 13-14 and lines 25-26, page 7, lines 10-11, page 8, lines 21-26, and FIG. 4. Newly added claim 53 is found at least at page 7, lines 1-4, 14-18, and 24-25. New claim 55 is supported at least by page 6, line 26 to page 7, line 1 and lines 11-14. Support for new claim 56 is found at least at page 8, lines 2-3 and FIG. 3. New claim 57 is found at page 9, lines 11-12 and 22-23. Support for new claim 58 is found at least at page 9, lines 23-25. New claim 59 is supported at least by page 5, lines 9-12. Support for new claim 60 is found at least at page 8, lines 13-16. New claim 61 is supported at least by page 8, lines 6-9. Claims 2, 6-7, 14, 16-37, and 41 have been canceled without prejudice. No question of new matter arises and entry of the amendments and new claims is respectfully requested.

Claims 1, 3-5, 8-13, 15, 38-40, and 42-62 are before the Examiner for consideration.

Request for Examiner Interview

Applicants respectfully request that the Examiner contact Applicants' representative, Amy L. Miller, at 703-435-6903 for an Examiner Interview prior to issuing an Office Action in the above-identified application.

Formal Matter

As shown above, Applicants have added new claims 47-62 by amendment (i.e., sixteen claims). Additionally, claims 2, 6-7, 14, 16-37, and 41 (i.e., twenty-six claims) have been canceled without prejudice. Because the total number of claims Applicants are submitting for examination (i.e., thirty-five claims) is not greater than the total number of claims previously presented and paid for (*i.e.*, thirty-seven claims), Applicants respectfully submit that no additional filing fees are required for newly added claims 47-62.

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In addition, Applicants respectfully submit that there are no fees required for new independent claim 52 because the total number of independent claims present in the application (*i.e.*, three independent claims) does not exceed the total amount of independent claims permitted by the U.S. Patent Office before occurring additional fees (*i.e.*, three claims). Furthermore, because support for newly added claims 47-62 is found in throughout the specification, as identified in the opening paragraph of the Remarks, Applicants respectfully submit that these newly added claims do not contain any new matter.

Rejection Under 35 U.S.C. §103(a)

Claims 1, 3, 5, 9-12, 15, 38-40, and 42-46 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,497,950 to Haile, *et al.* ("Haile") in view of U.S. Patent No. 5,660,908 to Kelman, *et al.* ("Kelman"). The Examiner asserts that Haile teaches that it is known in the headliner art to use thermoplastic bicomponent staple fibers and glass staple fibers. The Examiner admits that Haile does not teach specific headliner designs. In this regard, Kelman is cited for assertedly teaching a headliner that includes a base layer of fibrous material and a plurality of ribs thermally bonded to the base layer. The Examiner concludes that it would have been obvious to one of skill in the art to make the headliner of Haile in the design disclosed by Kelman.

In response to this rejection, Applicants first respectfully direct the Examiner's attention to independent claim 1 and submit that claim 1 defines a liner/insulator that is not taught or suggested within Haile and/or Kelman. Haile teaches binder fibers made from polyesters formed from the reaction product of at least about 50 mol% of a glycol having four or six carbon atoms by controlling the amounts of diethylene glycol and ethylene glycol to less than about 20 mol% of the glycol component. (*See, e.g.*, column 2, lines 26-32 and column 3, lines 50-58). Preferred polyesters are capable of resisting failure when the bonded objects are repeatedly subjected to elevated temperatures. (*See, e.g.*, column 10, lines 51-58). The polyester fibers may be in the form of unicomponent or bicomponent fibers. (*See, e.g.*, column 13, lines 22-24). These binder fibers may be blended with other fibers such as polyester, acrylic, nylon, and glass. (*See, e.g.*, column 13, lines 58-64).

Kelman teaches a recyclable automotive headliner formed from a batt of polyethylene terephthalate (PET) fibers. (*See, e.g.*, column 2, lines 12-15). The back side of the batt contains a plurality of impressions in the form of corrugations or "reverse ribs". (*See, e.g.*,

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column 2, lines 37-40). The corrugations include a plurality of corrugation channels disposed between corrugation ribs. (*See, e.g.*, column 2, lines 40-42). Full density PET fills each corrugation channel between the back side of the batt and the scrim layer. (*See, e.g.*, column 2, lines 61-62). The full density PET is heat-bonded to the low-melt fibers in the batt. (*See, e.g.*, column 2, lines 64-65). Alternatively, the PET filler material may be bonded to the batt by an adhesive. (*See, e.g.*, column 3, lines 14-17).

Applicants respectfully submit that neither Haile nor Kelman teach or suggest a liner/insulator in which a plurality of ribs of fibrous material extend from a uniform base layer of fibrous material where the fibrous ribs are thermally bonded to the base layer. In Kelman, the base layer (12) of the headliner does not have ribs that extend from and which are thermally bonded to a uniform base layer. (*See, e.g.*, FIG. 2). As shown in FIG. 3 of Kelman, the back side of the fibrous batt (12) includes a plurality of impressions in the form of corrugations (18) or "reverse ribs". (*See, e.g.*, column 2, lines 37-40). The corrugations (18) include corrugation channels (20) that define corrugation ribs (22). (*See, e.g.*, column 2, lines 40-42 and FIG. 2). Between the corrugations (18) and the front side of the batt (12) are areas (24) of reduced batt thickness and higher density fibers. (*See, e.g.*, column 2, lines 42-46). Thus, it is clear from the teachings of Kelman that the fibrous batt is <u>not</u> a uniform batt, and is, in fact, the opposite of a uniform base layer of fibrous material as is claimed in claim 1.

Additionally, it is respectfully submit that the corrugation ribs (22) identified by Kelman are merely part of the fibrous batt (12) that has not been compressed into regions of higher density (24). Consequently, they cannot be considered to be ribs corresponding to the ribs of the present invention which, as discussed above, extend from and are thermally bonded to the uniform base layer. Nor can the discontinuous channels (20) be considered to be a base layer from which ribs extend. With respect to the teachings of Haile, Haile is silent with respect to any teaching or suggestion of a headliner design, and thus cannot make up for the deficiencies of Kelman. As such, Applicants respectfully submit that the combination of the teachings of Haile and Kelman would not result in the liner/insulator of claim 1. Accordingly, it is respectfully submitted that the rejection of claim 1 must fail.

In addition, Applicants submit that there is no motivation for one of skill in the art to arrive at the liner/insulator of claim 1 based on the disclosures of Haile and/or Kelman. To establish a *prima facie* case of obviousness, there must be some motivation, either within the

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reference or in the knowledge of those of skill in the art, to modify the reference or combine the references' teachings, there must be a reasonable expectation of success, and the prior art references must meet all of the claim limitations. (*See, e.g., Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2142). Because neither Haile nor Kelman teach or suggest a liner/insulator that includes (1) a uniform base layer of fibrous material, and (2) a plurality of ribs of fibrous material extending from and thermally bonded to the base layer, where the base layer and plurality of ribs are selected from (a) thermoplastic polymer staple fibers and thermoplastic bicomponent fibers, (b) glass staple fibers and glass bicomponent fibers, (c) glass staple fibers and thermoplastic bicomponent fibers, and (d) a combination of (a), (b) and (c) as required by amended claim 1, there can be no motivation for one of ordinary skill in the art to arrive at the liner/insulator of claim 1 based on the disclosures of Haile and Kelman. Without some teaching or suggestion, there can be no motivation, and without motivation, there can be no *prima facie* case of obviousness.

With respect to the rejection of independent claim 38, Applicants respectfully direct the Examiner's attention to the amendments made to claim 38 and submit that claim 38 defines a liner/insulator that is not taught or suggested within Haile and/or Kelman. In particular, Applicants submit that Haile and Kelman, alone or in combination, do not teach or suggest a plurality of ribs of fibrous material positioned within slits of a fibrous base layer where the ribs are thermally bonded to the base layer. As discussed previously, Haile is silent with respect to any teaching or suggestion of a headliner design. Although Kelman teaches a design for a headliner, it is very different from the liner/insulator according to amended claim 38. As discussed above, Kelman teaches a fibrous batt (12) that contains a plurality of impressions in the form of corrugations or "reverse ribs" (18) extending across the back side of the batt (12). (*See, e.g.*, column 2, lines 37-40). A plurality of corrugation channels (20) are positioned between the corrugations (18). (*See, e.g.*, column 2, lines 40-42). Full density PET is heated, melted, and injected into each corrugation channel until the corrugation channel (20) is filled with the melted PET material (27). (*See, e.g.*, column 3, lines 58-60).

Applicants respectfully submit that there is simply no teaching or suggestion within Haile or Kelman of a liner/insulator that contains a plurality of ribs positioned within slits of a fibrous base layer as required by amended claim 38. In Kelman, the fibrous batt contains impressions (*i.e.*, corrugation channels (20)) that are filled with a melted PET material.

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Applicants respectfully submit that these corrugation channels (20) are vastly different from the slits in the base layer of the liner/insulator of claim 38. Additionally, Applicants submit that Kelman teaches away from a base layer having a plurality of slits with ribs positioned within the slits. In Kelman, the corrugation channels (20) and scrim (26) form a trapezoidal "torsion box" structure that resists bending and twisting forces. (*See, e.g.*, column 2, lines 57-61). Applicants respectfully submit that the slits claimed in claim 38 would be impractical or impossible to fill with melted PET and form a trapezoidal "torsion box". Thus, Applicants submit that, in view of this teaching of Kelman, one of skill in the art would be led away from utilizing a base layer that contained slits because a trapezoidal "torsion box" would not be formed.

In addition, Applicants submit that there is no motivation for one of skill in the art to arrive at the liner/insulator claimed in claim 38 based on the disclosures of Haile and Kelman. As discussed above, there must be some motivation, either within the reference or in the knowledge of those of skill in the art, to modify the reference or combine the references' teachings, there must be a reasonable expectation of success, and the prior art references must meet all of the claim limitations in order to establish a *prima facie* case of obviousness. (*See, e.g., Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2142). It is respectfully submitted that one of ordinary skill in the art would not be motivated to arrive at the liner/insulator claimed in claim 38 based on the teachings of Haile and Kelman because neither of the cited references teach or suggest (1) a base layer of fibrous material having a plurality of slits therein and (2) a plurality of ribs of fibrous material positioned within the slits and thermally bonded to the base layer, where the base layer and plurality of ribs are selected from (a) glass staple fibers and glass bicomponent fibers, (b) glass staple fibers and thermoplastic bicomponent fibers, and (c) a combination of (a) and (b). As a result, one of ordinary skill in the art would not be motivated to utilize a base layer that contains a plurality of slits in which are positioned a plurality of ribs based on the teachings of Haile and/or Kelman. Without some teaching or suggestion, there can be no motivation, and without motivation, there can be no *prima facie* case of obviousness. Accordingly, Applicants submit that claim 38 is patentably distinguishable over Haile and Kelman.

Additionally, Applicants submit that neither Haile nor Kelman teach or suggest glass bicomponent fibers. Kelman is silent with respect to any fiber other than PET, as the headliner is a recyclable headliner. Haile teaches that binder fibers may be in the form of

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bicomponent fibers. (*See, e.g.*, column 13, lines 22-24). In addition, Haile teaches that in the disclosed bicomponent fibers, the polyesters will be present in amounts from about 10 to about 75 weight percent of the bicomponent fiber. (*See, e.g.*, column 13, lines 39-42). The component may be selected from a wide range of other polymeric materials, such as, polyesters (polyethylene terephthalate (PET), polytrimethylene terephthalate (PTT), polybutylene terephthalate (PBT), polycyclohexylenedimethylene terephthalate polyesters (PCT), polyethylene naphthalenedicarboxylate (PEN)), and polylactic acid base polymers. (*See, e.g.*, column 13, lines 42-49). No where does Haile teach or suggest a glass bicomponent fiber. As such, Applicants respectfully submit that claims 47, 49, and 54 are separately patentable for this additional reason.

Further, Applicants respectfully submit that dependent claim 51 is also separately patentable. In Kelman, the base layer (12) of the headliner is not a uniform base layer. (*See, e.g.*, FIG. 2). As discussed above, areas (24) of reduced thickness and higher density fibers exist between the corrugations (18) and the front side of the batt (12). (*See, e.g.*, column 2, lines 42-46). Thus, the fibrous mat of Kelman is not a uniform batt. Haile does not teach or suggest a headliner design. Thus, it is respectfully submitted that claim 51 is patentably distinguishable over Kelman and Haile.

In view of the above, it is respectfully submitted that independent claims 1 and 38 are not taught or suggested by Haile and Kelman, either alone or in combination, and that claims 1 and 38 are therefore non-obvious and patentable. With respect to dependent claims 3-5, 8-13, 15, 39-40, and 42-46, Applicants submit that because independent claims 1 and 38 are not taught or suggested by Haile and/or Kelman and claims 3-5, 8-13, 15, 39-40, and 42-46 are each dependent upon claim 1 or 38 and contain the same elements as the claim from which they depend, dependent claims 3-5, 8-13, 15, 39-40, and 42-46 are also not taught or suggested by Haile and/or Kelman.

Accordingly, Applicants respectfully submit that claims 1, 3-5, 8-13, 15, 38-40, and 42-46 are not obvious over Haile in view of Kelman and respectfully request that this rejection be reconsidered and withdrawn.

Rejection Under 35 U.S.C. §103(a)

Claims 4 and 8 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,497,950 to Haile, *et al.* ("Haile") in view of U.S. Patent No. 5,660,908

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to Kelman, *et al.* ("Kelman") as applied to claims 1, 3, 5, 9-13, 15, 38-40, and 38-40 above, and further in view of U.S. Patent No. 5,892,187 to Patrick ("Patrick"). The Examiner admits that Kelman is silent with respect to any teaching of the distance between the ribs and the width of the ribs. Patrick is cited for assertedly teaching that it is known in the headliner art to vary the distance between the ribs and the width of the ribs based on the desired sound or noise to be attenuated. In addition, the Examiner asserts that Patrick teaches that the width of the ribs may be about 22 mm or less. The Examiner concludes that it would have been obvious to one of skill in the art to space the ribs at least about 0.25 inches and to have a width of about 0.5 to 3.0 inches with the expectation of successfully practicing the invention based on the desired sound or noise to be attenuated.

In response to this rejection, Applicants respectfully direct the Examiner's attention both to the amendments made to claim 1 and to the arguments presented above with respect to the rejection of claims 1, 3, 5, 9-12, 15, 38-40, and 42-46 under 35 U.S.C. §103(a) over Haile in view of Kelman and submit that claim 1, as amended, defines a liner/insulator that is not taught or suggested by Haile and/or Kelman. As discussed above, neither Haile nor Kelman teach or suggest a liner/insulator in which a plurality of ribs of fibrous material extend from a uniform base layer of fibrous material where the fibrous ribs are thermally bonded to the base layer as claimed in amended claim 1. Patrick does not teach or suggest a uniform base with fibrous ribs thermally bonded to the base, and thus does not make up for the deficiencies of Haile and Kelman, namely, a plurality of fibrous ribs extending from and thermally bonded to a uniform base. Therefore, it is respectfully submitted that claim 1, as amended, is not taught or suggested by Haile, Kelman, and/or Patrick. As such, Applicants respectfully submit that claim 1 is non-obvious and patentable over Haile, Kelman, and Patrick, in any combination. Because claims 4 and 8 are dependent upon claim 1, which, as discussed above, is neither taught nor suggested by Haile and Kelman, and because Patrick adds nothing to the teachings of Haile or Kelman with respect to ribs extending from a uniform base, Applicants submit that claims 4 and 8 are not taught or suggested by the combination of Haile, Kelman and/or Patrick.

In view of the above, Applicants submit that claims 4 and 8 are not obvious over Haile, Kelman and/or Patrick and respectfully request that this rejection be reconsidered and withdrawn.

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Rejection Under 35 U.S.C. §103(a)

Claims 1, 3, 5, 9-13, 15, 38-40, and 42-46 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,497,950 to Haile, *et al.* ("Haile") in view of U.S. Patent No. 5,660,908 to Kelman, *et al.* ("Kelman") and further in view of U.S. Patent No. 5,399,411 to Dijkema, *et al.* ("Dijkema"). The Examiner asserts that Haile teaches that it is known in the headliner art to use thermoplastic bicomponent staple fibers and glass staple fibers. Dijkema is cited for disclosing that it is assertedly known in the headliner art to use glass staple fibers. The Examiner admits that Haile does not teach specific headliner designs. In this regard, Kelman is cited for assertedly teaching a headliner that includes a base layer of fibrous material and a plurality of ribs thermally bonded to the base layer. The Examiner concludes that it would have been obvious to one of skill in the art to make the headliner of Haile in the design disclosed by Kelman.

In response to this rejection, Applicants first respectfully direct the Examiner's attention to independent claim 1 and submit that claim 1 defines a liner/insulator that is not taught or suggested within Haile, Kelman, and/or Dijkema. Applicants submit that because the fibers of Haile and the headliner of Kelman are discussed in detail above, the fibers of Haile and the headliner of Kelman will not be discussed in detail with respect to the rejection of claim 38 for purposes of brevity.

Dijkema teaches a method of making a laminate for use in reinforcing roofing materials. (*See, e.g.*, column 1, lines 40-41). The laminate is formed of at least two layers bonded together by heat and pressure treating. (*See, e.g.*, column 1, lines 57-58). The first layer is a spun bonded nonwoven layer containing thermoplastic endless filaments. (*See, e.g.*, column 1, lines 58-60 and column 2, lines 33-35). It is preferred that the endless fibers are bicomponent fibers containing a polyester as the core component. (*See, e.g.*, column 2, lines 37-42). The second layer is a wet-laid nonwoven layer formed of short staple fibers. (*See, e.g.*, column 1, lines 60-63 and column 2, lines 52-57). Glass fibers are preferred short staple fibers. (*See, e.g.*, column 2, line 68 to column 3, line 1). If the strength is not sufficient, yarns made of endless filaments, particularly polyester filaments and/or glass filaments, can be added when manufacturing the second layer when the mixture is applied to the water-permeable substrate. (*See, e.g.*, column 3, lines 31-36).

Applicants respectfully submit that none of Haile, Kelman, or Dijkema teach or suggest a liner/insulator in which a plurality of ribs of fibrous material extends from a

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uniform base layer of fibrous material where the fibrous ribs are thermally bonded to the base layer. In Kelman, the base layer (12) of the headliner does not have ribs that extend from and which are thermally bonded to a uniform base layer. (*See, e.g.*, FIG. 2). As shown in FIG. 3 of Kelman, the back side of the fibrous batt (12) includes a plurality of impressions in the form of corrugations (18) or "reverse ribs". (*See, e.g.*, column 2, lines 37-40). The corrugations (18) include corrugation channels (20) that define corrugation ribs (22). (*See, e.g.*, column 2, lines 40-42 and FIG. 2). Between the corrugations (18) and the front side of the batt (12) are areas (24) of reduced batt thickness and higher density fibers. (*See, e.g.*, column 2, lines 42-46). Thus, it is clear from the teachings of Kelman that the fibrous batt is not a uniform batt, and is, in fact, the opposite of a uniform base layer of fibrous material as is claimed in claim 1.

Additionally, it is respectfully submit that the corrugation ribs (22) identified by Kelman are merely part of the fibrous batt (12) that has not been compressed into regions of higher density (24). Consequently, they cannot be considered to be ribs corresponding to the ribs of the present invention which, as discussed above, extend from and are thermally bonded to the uniform base layer. Nor can the discontinuous channels (20) be considered to be a base layer from which ribs extend. With respect to the teachings of Haile and Dijkema, both Haile and Dijkema are silent with respect to any teaching or suggestion of a headliner design, and thus cannot make up for the deficiencies of Kelman. As such, Applicants respectfully submit that the combination of the teachings of Haile, Kelman, and Dijkema would not result in the liner/insulator of claim 1. Accordingly, it is respectfully submitted that the rejection of claim 1 must fail.

In addition, Applicants submit that there is no motivation for one of skill in the art to arrive at the liner/insulator of claim 1 based on the disclosures of Haile, Kelman and/or Dijkema. To establish a *prima facie* case of obviousness, there must be some motivation, either within the reference or in the knowledge of those of skill in the art, to modify the reference or combine the references' teachings, there must be a reasonable expectation of success, and the prior art references must meet all of the claim limitations. (*See, e.g., Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2142). Because Haile, Kelman, and Dijkema do not teach or suggest a liner/insulator that includes (1) a uniform base layer of fibrous material, and (2) a plurality of ribs of fibrous material extending from and thermally bonded to the base layer, where the base layer and

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plurality of ribs are selected from (a) thermoplastic polymer staple fibers and thermoplastic bicomponent fibers, (b) glass staple fibers and glass bicomponent fibers, (c) glass staple fibers and thermoplastic bicomponent fibers, and (d) a combination of (a), (b) and (c) as required by amended claim 1, there can be no motivation for one of ordinary skill in the art to arrive at the liner/insulator of claim 1 based on the disclosures of Haile, Kelman, and/or Dijkema. Without some teaching or suggestion, there can be no motivation, and without motivation, there can be no *prima facie* case of obviousness.

With respect to the rejection of independent claim 38, Applicants respectfully direct the Examiner's attention to the amendments made to claim 38 and submit that claim 38 defines a liner/insulator that is not taught or suggested within Haile, Kelman, and/or Dijkema. In particular, Applicants submit that Haile, Kelman, and Dijkema, alone or in combination, do not teach or suggest a plurality of ribs of fibrous material positioned within slits of a fibrous base layer where the ribs are thermally bonded to the base layer. As discussed previously, Haile and Dijkema are silent with respect to any teaching or suggestion of a headliner design. Although Kelman teaches a design for a headliner, it is very different from the liner/insulator according to amended claim 38. As discussed above, Kelman teaches a fibrous batt (12) that contains a plurality of impressions in the form of corrugations or "reverse ribs" (18) extending across the back side of the batt (12). (*See, e.g.*, column 2, lines 37-40). A plurality of corrugation channels (20) are positioned between the corrugations (18). (*See, e.g.*, column 2, lines 40-42). Full density PET is heated, melted, and injected into each corrugation channel until the corrugation channel (20) is filled with the melted PET material (27). (*See, e.g.*, column 3, lines 58-60).

Applicants respectfully submit that there is simply no teaching or suggestion within Haile, Kelman, or Dijkema of a liner/insulator that contains a plurality of ribs positioned within slits of a fibrous base layer as required by amended claim 38. In Kelman, the fibrous batt contains impressions (*i.e.*, corrugation channels (20)) that are filled with a melted PET material. Applicants respectfully submit that these corrugation channels (20) are vastly different from the slits in the base layer of the liner/insulator of claim 38. Additionally, Applicants submit that Kelman teaches away from a base layer having a plurality of slits with ribs positioned within the slits. In Kelman, the corrugation channels (20) and scrim (26) form a trapezoidal "torsion box" structure that resists bending and twisting forces. (*See, e.g.*, column 2, lines 57-61). Applicants respectfully submit that the slits claimed in claim 38

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would be impractical or impossible to fill with melted PET and form a trapezoidal "torsion box". Thus, Applicants submit that, in view of this teaching of Kelman, one of skill in the art would be led away from utilizing a base layer that contained slits because a trapezoidal "torsion box" would not be formed.

In addition, Applicants submit that there is no motivation for one of skill in the art to arrive at the liner/insulator claimed in claim 38 based on the disclosures of Haile, Kelman, and Dijkema. As discussed above, there must be some motivation, either within the reference or in the knowledge of those of skill in the art, to modify the reference or combine the references' teachings, there must be a reasonable expectation of success, and the prior art references must meet all of the claim limitations in order to establish a *prima facie* case of obviousness. (*See, e.g., Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2142). It is respectfully submitted that one of ordinary skill in the art would not be motivated to arrive at the liner/insulator claimed in claim 38 based on the teachings of Haile, Kelman, and Dijkema because none of the cited references teach or suggest (1) a base layer of fibrous material having a plurality of slits therein and (2) a plurality of ribs of fibrous material positioned within the slits and thermally bonded to the base layer, where the base layer and plurality of ribs are selected from (a) glass staple fibers and glass bicomponent fibers, (b) glass staple fibers and thermoplastic bicomponent fibers, and (c) a combination of (a) and (b). As a result, one of ordinary skill in the art would not be motivated to utilize a base layer that contains a plurality of slits in which are positioned a plurality of ribs based on the teachings of Haile, Kelman and/or Dijkema. Without some teaching or suggestion, there can be no motivation, and without motivation, there can be no *prima facie* case of obviousness. Accordingly, Applicants submit that claim 38 is patentably distinguishable over Haile, Kelman, and/or Dijkema.

Additionally, Applicants submit that none of Haile, Kelman, or Dijkema teach or suggest glass bicomponent fibers. Kelman is silent with respect to any fiber other than PET, as the headliner is a recyclable headliner. Haile teaches that binder fibers may be in the form of bicomponent fibers. (*See, e.g.*, column 13, lines 22-24). In addition, Haile teaches that in the disclosed bicomponent fibers, the polyesters will be present in amounts from about 10 to about 75 weight percent of the bicomponent fiber. (*See, e.g.*, column 13, lines 39-42). The component may be selected from a wide range of <u>other polymeric</u> materials, such as, polyesters (polyethylene terephthalate (PET), polytrimethylene terephthalate (PTT),

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polybutylene terephthalate (PBT), polycyclohexylenedimethylene terephthalate polyesters (PCT), polyethylene naphthalenedicarboxylate (PEN)), and polylactic acid base polymers. (*See, e.g.*, column 13, lines 42-49). No where does Haile teach or suggest a glass bicomponent fiber. Dijkema is silent with respect to any teaching or suggestion of glass bicomponent fibers. As such, Applicants respectfully submit that claims 47, 49, and 54 are separately patentable for this additional reason.

Further, Applicants respectfully submit that dependent claim 51 is also separately patentable. In Kelman, the base layer (12) of the headliner is not a uniform base layer. (*See, e.g.*, FIG. 2). As discussed above, areas (24) of reduced thickness and higher density fibers exist between the corrugations (18) and the front side of the batt (12). (*See, e.g.*, column 2, lines 42-46). Thus, the fibrous mat of Kelman is not a uniform batt. Haile and Dijkema do not teach or suggest headliner designs. Thus, it is respectfully submitted that claim 51 is patentably distinguishable over Kelman and Haile or Dijkema.

In view of the above, it is respectfully submitted that independent claims 1 and 38 are not taught or suggested by Haile, Kelman, and Dijkema, either alone or in any combination, and that claims 1 and 38 are therefore non-obvious and patentable. With respect to dependent claims 3-5, 8-13, 15, 39-40, and 42-46, Applicants submit that because independent claims 1 and 38 are not taught or suggested by Haile, Kelman and/or Dijkema and claims 3-5, 8-13, 15, 39-40, and 42-46 are each dependent upon claim 1 or 38 and contain the same elements as the claim from which they depend, dependent claims 3-5, 8-13, 15, 39-40, and 42-46 are also not taught or suggested by Haile and/or Kelman and/or Dijkema.

Accordingly, Applicants respectfully submit that claims 1, 3-5, 8-13, 15, 38-40, and 42-46 are not obvious over Haile in view of Kelman and further in view of Dijkema and respectfully request that this rejection be reconsidered and withdrawn.

Rejection Under 35 U.S.C. §103(a)

Claims 4 and 8 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,497,950 to Haile, *et al.* ("Haile") in view of U.S. Patent No. 5,660,908 to Kelman, *et al.* ("Kelman") and further in view of Dijkema as applied to claims 1, 3, 5, 9-13, 15, 38-40, and 38-40 above, and further in view of U.S. Patent No. 5,892,187 to Patrick ("Patrick"). The Examiner admits that Kelman is silent with respect to any teaching of the distance between the ribs and the width of the ribs. Dijkema is cited for disclosing that it is

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assertedly known in the headliner art to use glass staple fibers. Patrick is cited for assertedly teaching that it is known in the headliner art to vary the distance between the ribs and the width of the ribs based on the desired sound or noise to be attenuated. In addition, the Examiner asserts that Patrick teaches that the width of the ribs may be about 22 mm or less. The Examiner concludes that it would have been obvious to one of skill in the art to space the ribs at least about 0.25 inches and to have a width of about 0.5 to 3.0 inches with the expectation of successfully practicing the invention based on the desired sound or noise to be attenuated.

In response to this rejection, Applicants respectfully direct the Examiner's attention both to the amendments made to claim 1 and to the arguments presented above with respect to the rejection of claims 1, 3, 5, 9-12, 15, 38-40, and 42-46 under 35 U.S.C. §103(a) over Haile in view of Kelman and further in view of Dijkema and submit that claim 1, as amended, defines a liner/insulator that is not taught or suggested by Haile, Kelman and/or Dijkema. As discussed above, none of Haile, Kelman, or Dijkema teach or suggest a liner/insulator in which a plurality of ribs of fibrous material extend from a uniform base layer where the fibrous ribs are thermally bonded to the base layer as claimed in amended claim 1. Patrick does not teach or suggest a uniform base with fibrous ribs thermally bonded to the base, and thus does not make up for the deficiencies of Haile, Kelman, and Dijkema, namely, a plurality of fibrous ribs extending from and thermally bonded to a uniform base. Therefore, it is respectfully submitted that claim 1, as amended, is not taught or suggested by Haile, Kelman, Dijkema, and/or Patrick. As such, Applicants respectfully submit that claim 1 is non-obvious and patentable over Haile, Kelman, Dijkema and Patrick, in any combination. Because claims 4 and 8 are dependent upon claim 1, which, as discussed above, is neither taught nor suggested by Haile, Kelman, and Dijkema, and because Patrick adds nothing to the teachings of Haile, Kelman, or Dijkema with respect to ribs extending from a uniform base, Applicants submit that claims 4 and 8 are not taught or suggested by the combination of Haile, Kelman, Dijkema, and/or Patrick.

In view of the above, Applicants submit that claims 4 and 8 are not obvious over Haile, Kelman, Dijkema, and/or Patrick and respectfully request reconsideration and withdrawal of this rejection.

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Newly Added Independent Claim 52

Although not included in any of the outstanding rejections, Applicants wish to briefly address the patentability of newly added independent claim 52. Applicants respectfully submit that none of the Examiner's cited references, either alone or in any combination, teach or suggest a liner/insulator that includes (1) a base layer of fibrous material and (2) a plurality of cubed, fibrous ribs extending from and thermally bonded to the base layer. Each of Haile, Kelman, Dijkema, and Patrick are silent with respect to cubed fibrous ribs that extend from and which are thermally bonded to a base layer. Therefore, it is respectfully submitted that none of Haile, Kelman, Dijkema, or Patrick, either alone or in any combination, teach or suggest Applicants' invention as recited in newly added independent claim 52. Accordingly, it is submitted that claim 52 is non-obvious and patentable. Because claims 53-62 are dependent upon claim 52 and contain the same elements as independent claim 52, it is respectfully submitted that claims 53-62 are also patentable over Haile, Kelman, Dijkema, and/or Patrick.

Conclusion

In light of the above, Applicants believe that this application is now in condition for allowance and therefore request favorable consideration.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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If necessary, the Commissioner is hereby authorized to charge payment or credit any overpayment to Deposit Account No. 50-0568 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

Date: 8/2/07

Margaret S. Millikin
Registration No. 38,969

Owens Corning
Patent Department, Bldg. 21-0
2790 Columbus Road
Granville, Ohio 43023
(740) 321-5359

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